United States Patent [19]

Tat-Kee

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[54] DATA PROCESSOR FLUSH HINGE ASSEMBLY

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[56] References Cited

U.S. PATENT DOCUMENTS

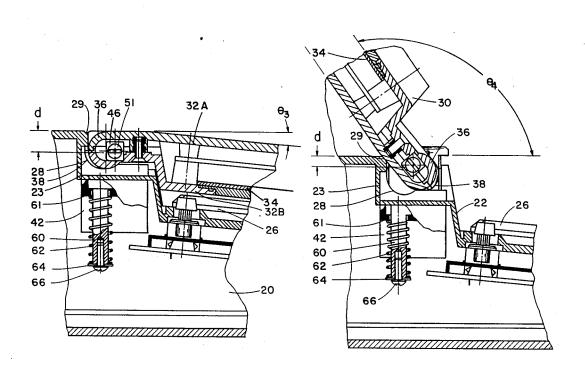
		Loomis	
2,441,455	5/1948	Tetzman	16/337
2,500,280	3/1950	Feldman	16/337
4,177,540	12/1979	Gorton	16/337
4,332,056	6/1982	Griffin	16/341
4,609,234	9/1986	Naniwa	16/341

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[57] ABSTRACT

A combined flush hinge and hold-open is described for hinging a panel flush with respect to a surface, such as may be used for hinging a liquid crystal display to a portable computer. The panel is connected to the surface through a pair of hinges, which are mounted on spring-activated follower parts which lie flush with the surface when the panel is closed. Upon rotation of the panel from the closed position, a cam surface on the panel, shaped in the form of an outward spiral, cooperates with an involute surface within the recess to displace the hinge outwardly, which permits the panel to rotate past the upper edge of the recess to opening angles greater than 90 degrees relative to the closed position, including up to 180 degrees. The panel is held open in the selected angular position by means of the frictional fit between an O-ring and the end of a bearing which is rotatably retained within the follower to compress the O-ring between it and the follower such that the frictional resistance between the bearing and the follower may be adjusted to control the holding force on the panel.

11 Claims, 10 Drawing Figures



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